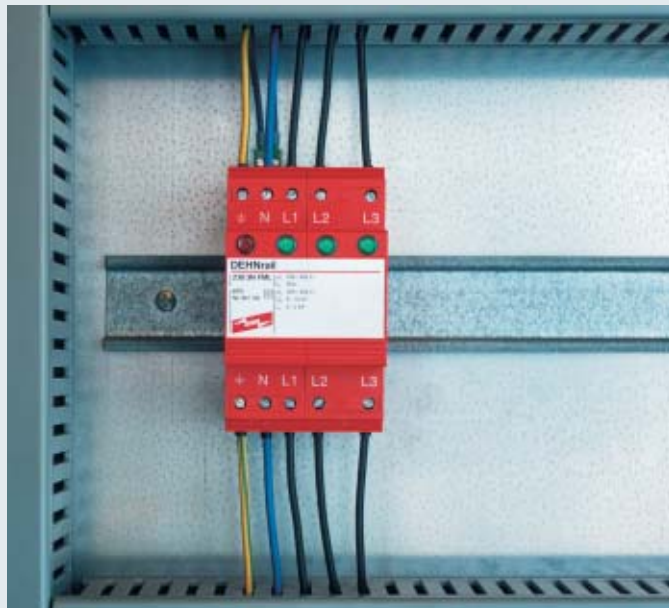


## SURGE ARRESTERS – TYPE 3

## Four-pole Surge Arrester

SPD Type 3 according to EN 61643-11;  
 Classification D according to E DIN VDE 0675-6;  
 SPD Class III according to IEC 61643-1;



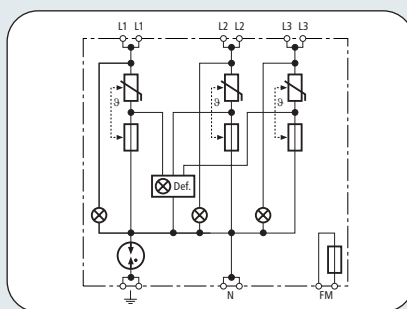
For protection of the power supply of industrial electronic equipment against transient surges in switchgears.

The 4-pole surge arrester DEHNrail 230 3N has been developed especially for protection of 3-phase terminal equipment in industrial electronic systems. Adjusted to this kind of environment, the arrester has been designed for 35 mm DIN rails. The low protection level as well as the comprehensive protection against common-mode and differential-mode interferences is characterising for DEHNrail 230 3N. In order to provide the low protection levels in an optimal way for the terminal equipment to be protected, the device has been designed with input and output terminals for

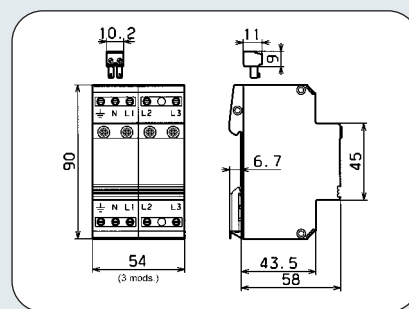
- Four-pole surge protection with control device and disconnecter
- Visual function indication for the three phase conductors (green) and visual fault indication (red)
- Floating remote signalling contact (break contact) for fault indication (no simultaneous disconnection from mains)

**DR 230 3N FML:** Four-pole compact SPD with visual function indication and optional remote signalling

through-wiring. Thus DEHNrail 230 3N adapts itself ideally to the cable run upstream of the terminal equipment without requiring additional terminal blocks. The very compact design of DEHNrail 230 3N already includes the approved disconnecter. This isolates an overloaded circuit without interrupting the supply circuit. Apart from the standard visual indication with a green light for each phase as well as a red light for fault indication, DEHNrail 230 3N provides a 2-pole terminal for remote signalling.



Basic circuit diagram DR 230 3N FML



Dimension drawing DR 230 3N FML

DR 230 3N FML: Four-pole surge arrester with control device and disconnector

## DR 230 3N FML

SPD Type according to EN 61643-11	Type 3
SPD according to IEC 61643-1	Class III
Classification according to E DIN VDE 0675-6	D
Nominal voltage ac $U_N$	230/400 V
Max. continuous ac voltage $U_C$	255/440 V
Nominal load current ac $I_L$	16 A
Nominal discharge current (8/20) [L-N] $I_n$	3 kA
Nominal discharge current (8/20) [L+N-PE] $I_n$	5 kA
Combined impulse [L-N] $U_{OC}$	6 kV
Combined impulse [L+N-PE] $U_{OC}$	10 kV
Voltage protection level [L-N] $U_p$	$\leq 1.25$ kV
Voltage protection level [L/N-PE] $U_p$	$\leq 1.5$ kV
Response time [L-N] $t_A$	$\leq 25$ ns
Response time [L/N-PE] $t_A$	$\leq 100$ ns
Max. mains-side overcurrent protection	16 A gL/gG or B 16 A
Short circuit withstand capability	
at mains-side overcurrent protection with 16 A gL/gG	6 kA <sub>rms</sub>
TOV voltage [L-N] $U_T$	335 V / 5 sec.
TOV voltage [L/N-PE] (I) $U_T$	400 V / 5 sec.
TOV voltage [L/N-PE] (II) $U_T$	1200 V + $U_0$ / 200 ms
Indication of disconnector	red light
Operating state indication	green light
Operating temperature range $T_U$	-40°C...+80°C
Cross-sectional area min.	0.5 mm <sup>2</sup> solid / flexible
Cross-sectional area max.	4 mm <sup>2</sup> stranded / flexible
Mounting on	35 mm DIN rail acc. to EN 60715
Enclosure material	red thermoplastic, UL 94 V-0
Degree of protection	IP 20
Dimension	3 mods., DIN 43880
Type of remote signalling contact	break contact
Switching capacity ac	250 V/0.5 A
Switching capacity dc	250 V/0.1 A; 125 V/0.2 A; 75 V/0.5 A
Cross-sectional area for remote signalling terminals	max. 1.5 mm <sup>2</sup> solid / flexible

## Ordering information

Type	DR 230 3N FML
Part No.	901 130
Packing unit	1 pc(s)